UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH CAROLINA
CHARLESTON DIVISION

IN RE: AQUEOUS FILM-FORMING FOAMS PRODUCTS LIABILITY LITIGATION	MDL No. 2873 Master Docket No. 2:18-mn-2873 Judge Richard Gergel Civil Action No.: 2:23-cv-03103-RMG
OAK BLUFFS WATER DISTRICT, **Plaintiff,** **v.** **3M COMPANY (f/k/a Minnesota Mining and Manufacturing Company);** **AGC CHEMICALS AMERICAS INC.;** **AMEREX CORPORATION;** **ANGUS FIRE ARMOUR CORP.;** **ARCHROMA U.S., INC.;** **ARKEMA INC.;** **BASF CORPORATION;** **BUCKEYE FIRE EQUIPMENT COMPANY;** **CARRIER GLOBAL CORPORATION;** **CHEMDESIGN PRODUCTS, INC.;** **CHEMGUARD, INC.;** **CHEMICALS, INC.;** **CHEMOURS COMPANY FC, LLC;** **CLARIANT CORPORATION;** **CORTEVA, INC.;** **DAIKIN AMERICA, INC.;** **DEEPWATER CHEMICALS, INC.;** **DUPONT DE NEMOURS, INC.;** **DYNAX CORPORATION;** **DYNEON, LLC;** **E. I. DUPONT DE NEMOURS AND COMPANY;** **FIRE SERVICES PLUS, INC.;** **HONEYWELL INTERNATIONAL, INC.;** **HONEYWELL SAFETY PRODUCTS US, INC.;**	**DIRECT FILED COMPLAINT AND DEMAND FOR JURY TRIAL PURSUANT TO CASE MANAGEMENT ORDER NO. 3**

MINE SAFETY APPLIANCES COMPANY, LLC; **NATION FORD CHEMICAL COMPANY;** **NATIONAL FOAM, INC.;** **PERIMETER SOLUTIONS, LP;** **RAYTHEON TECHNOLOGIES CORPORATION;** **ROYAL CHEMICAL COMPANY;** **THE CHEMOURS COMPANY;** **TYCO FIRE PRODUCTS LP;** **UTC FIRE & SECURITY AMERICAS CORPORATION, INC.;** **VERDE ENVIRONMENTAL, INC. and JOHN DOE DEFENDANTS 1-20,** Defendants.	

COMPLAINT AND DEMAND FOR JURY TRIAL

Plaintiff, OAK BLUFFS WATER DISTRICT ("Plaintiff" or "OBWD"), by and through its undersigned counsel, hereby files this Complaint against Defendants 3M COMPANY, f/k/a Minnesota Mining and Manufacturing, Co., AGC CHEMICALS AMERICAS INC., AMEREX CORPORATION, ARKEMA INC., ANGUS FIRE ARMOUR CORP., ARCHROMA U.S., INC., BASF CORPORATION, BUCKEYE FIRE EQUIPMENT COMPANY, CARRIER GLOBAL CORPORATION, CHEMDESIGN PRODUCTS, INC., CHEMGUARD INC., CHEMICALS, INC., CHEMOURS COMPANY FC, LLC, CLARIANT CORPORATION, CORTEVA, INC., DAIKIN AMERICA, INC., DEEPWATER CHEMICALS, INC., DUPONT DE NEMOURS, INC., DYNAX CORPORATION, DYNEON, LLC, E. I. DUPONT DE NEMOURS AND COMPANY, FIRE SERVICES PLUS, INC., HONEYWELL INTERNATIONAL, INC., HONEYWELL SAFETY PRODUCTS US, INC., MINE SAFETY APPLIANCES COMPANY, LLC, NATION FORD CHEMICAL COMPANY, NATIONAL FOAM, INC., PERIMETER

SOLUTIONS, LP, RAYTHEON TECHNOLOGIES CORPORATION, ROYAL CHEMICAL COMPANY, THE CHEMOURS COMPANY, TYCO FIRE PRODUCTS, LP, UTC FIRE & SECURITY AMERICAS CORPORATION, INC., VERDE ENVIRONMENTAL, INC. and JOHN DOE DEFENDANTS 1-20, fictitious names whose present identities are unknown (collectively, "Defendants"), and alleges, upon information and belief, as follows:

INTRODUCTION

1. Plaintiff brings this action against Defendants to protect the public health, safety, welfare and environment; to comply with imminent U.S. Environmental Protection Agency ("EPA") regulations; and to recover any and all past and future compensatory and/or consequential damages for the investigation, remediation, removal, disposal, treatment, and monitoring of the ongoing contamination of its surface and ground water, infrastructures, facilities, and properties caused and/or created by Defendants' products, punitive damages, attorneys' fees and costs, as well as any and all other damages available as a result of the actions and/or inactions of Defendants.

2. Plaintiff, Oak Bluffs Water District ("OBWD"), is a non-profit, locally controlled public water system created by the Massachusetts legislature to operate as a self-supporting unit of local government. OBWD provides water-related services and operates a public water supply system on the island of Martha's Vineyard, which is located south of Cape Cod in Dukes County, Massachusetts.

3. Plaintiff OBWD is responsible for providing potable water to individuals and businesses in Oak Bluffs, Massachusetts.

4. OBWD provides drinking water to 4,443 metered accounts through seventy-seven (77) miles of water mains, which OBWD operates and maintains.

5. Due to the seasonal nature of Martha's Vineyard, OBWD serves an average population of 5,341 during the winter (October through March) and an average summer population of 24,000 (April through September).

6. Plaintiff has a property interest in the water it appropriates, purchases, reclaims, treats, stores, and distributes, as well as its water sources, water supplies, piping, distribution system, water treatment plants, stormwater systems, conveyances, infrastructure, and all lands, properties and facilities owned and/or operated by Plaintiff (collectively "Plaintiff's Property").

7. Per- and polyfluoroalkyl substances ("PFAS"), including perfluorooctanoic acid ("PFOA") and perfluorooctane sulfonic acid ("PFOS") have been detected on Plaintiff's Property, including Plaintiff's ground water supply wells.

8. PFAS are man-made compounds that are persistent, toxic, and bioaccumulative when released into the environment, and pose a significant risk to human health and safety.

9. Defendants in this case are companies that designed, manufactured, formulated, marketed, distributed, sold, and/or assumed or acquired liabilities for the manufacture and/or sale of PFOA, PFOS, PFBS, the chemical precursors of PFOA and/or PFOS and/or PFBS, and/or products containing PFOA, PFOS, PFBS and/or their chemical precursors (collectively "Fluorosurfactant Products"), and/or assumed or acquired liabilities for the manufacture and/or sale of Fluorosurfactant Products.

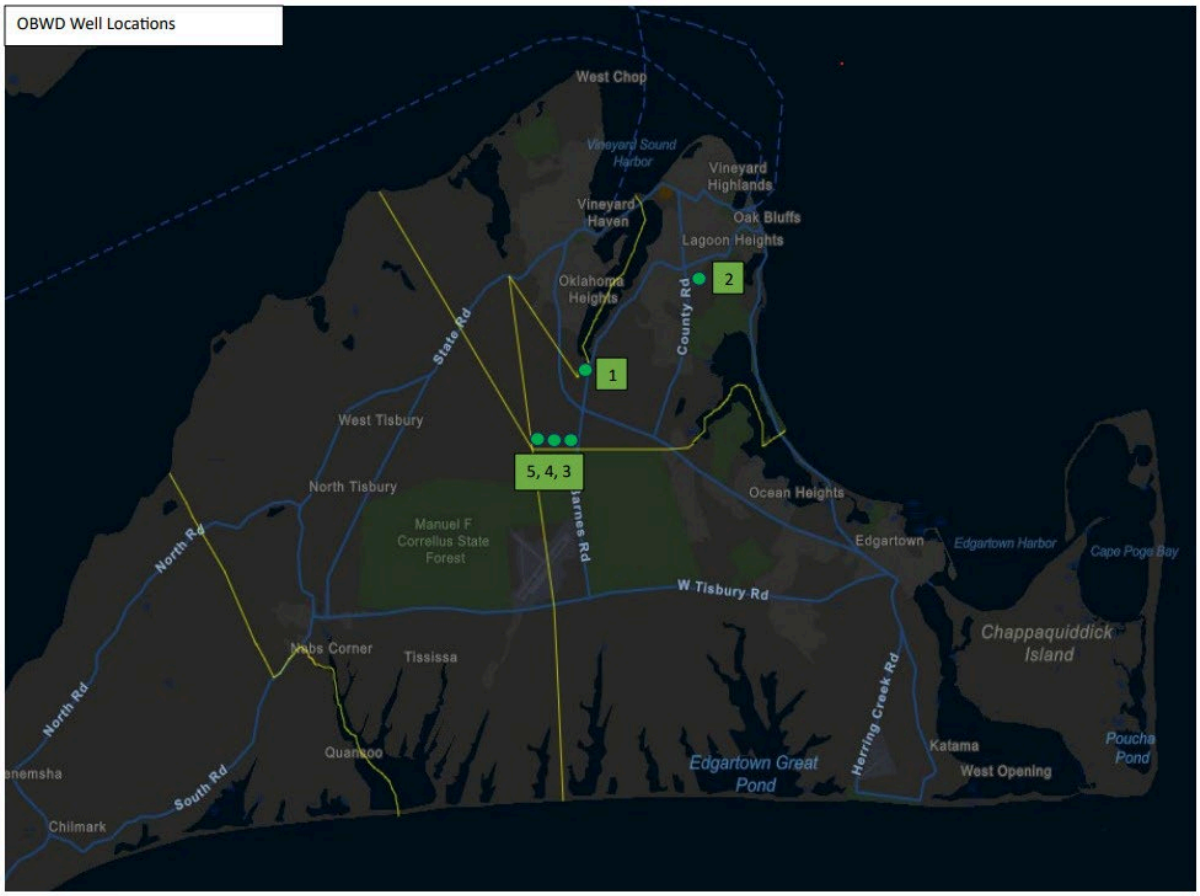
10. Defendants' Fluorosurfactant Products include, but are not limited to, Teflon, Scotchguard, waterproofing compounds, stain proofing compounds, paper and cloth coatings, waves, aqueous film-forming foam ("AFFF"), and various other products.

11. AFFF is a firefighting agent used to control and extinguish Class B fuel fires and is used at sites such as military bases, airports, petroleum refineries, and fire training centers.

12. Defendants' AFFF contained PFOS, PFOA, PFBS, and/or the chemical precursors to PFOS and/or PFBS.

13. Defendants designed, manufactured, formulated, marketed, distributed, sold and/or assumed or acquired liabilities for the manufacture and/or sale of Fluorosurfactant Products with the knowledge that these toxic compounds would be released into the environment during the intended uses of these Products, even when used as directed and intended by Defendants.

14. OBWD receives water from five (5) groundwater supply wells that draw from Martha's Vineyard's sole source aquifer: 1) Lagoon Pond Well, 2) Farm Neck Well, 3) State Forest Well, 4) Madison Alwardt Sr. Well, 5) John H. Randolph, Jr. Well. Below is a map that displays the abovementioned wells.



15. In 2022, OBWD produced 411.7 million gallons of potable drinking water with the highest daily demand of 3.357 million gallons.

16. On information and belief, AFFF containing PFAS was used in and around Oak Bluffs, Massachusetts for fire suppression activities.

17. PFAS has been detected in and around the Martha's Vineyard Airport ("MVY"). Specifically, PFAS were detected in eighty-four (84) private wells south of MVY. Forty-one (41) of these private wells required the installation of point-of-entry ("POET") systems.

18. These POET systems are comprised of vessels with 55 pounds of granular activated carbon ("GAC"), a cartridge filter, and a flow totalizer.

19. Title 14 Code of Federal Regulation Part 139 requires airport operators, such as MVY, to maintain aircraft rescue vehicles and fire suppression operating systems, which utilize AFFF. To help ensure their operability, the Federal Aviation Administration ("FAA") recommends testing these vehicles and systems every 6 months.

20. Upon information and belief, AFFF containing PFAS has been continuously discharged at MVY for decades and has contaminated the surface and ground water in and around Oak Bluffs, Massachusetts.

21. Oak Bluffs Fire & EMS maintains an active EMS location at 6 Firehouse Lane, Oak Bluffs, Massachusetts 02557 ("Oak Bluffs EMS"), which is near several OBWD water supply wells.

22. Upon information and belief, AFFF containing PFAS has been discharged at Oak Bluffs EMS for decades and has contaminated the surface and ground water in and around Oak Bluffs, Massachusetts.

23. In 2022, OBWD performed PFAS testing that yielded a result of 9.09 parts per trillion ("ppt") from OBWD's Lagoon Pond Well, which was comprised 2.15 ppt of perfluoroheptanoic acid ("PFHpA"), 2.15 ppt of Perfluorohexane sulfonate ("PFHxS"), and 4.79 ppt of PFOA. OBWD anticipates additionally testing of all OBWD wells during 2023 and 2024.

24. Plaintiff files this lawsuit to seek abatement of an ongoing nuisance, to recover compensatory and all other damages and relief, including all necessary funds to compensate Plaintiff for the costs of investigating and remediating the contamination of surface and ground water, impacted by PFAS; designing, constructing, installing, operating, and maintaining the treatment facilities and equipment required to remove PFAS from its public water supplies; and for such other damages and relief the Court may order.

25. At all times pertinent herein, Plaintiff did not know, nor should Plaintiff have known, of the ongoing contamination of its Property and wells through the release, use, storage and/or disposal of Fluorosurfactant Products, like AFFF, as Defendants did not disclose the toxic nature and harmful effects of these Fluorosurfactant Products.

26. A principal purpose of this lawsuit is to hold Defendants liable for the costs the Plaintiff has incurred, and expects to incur, to clean up the surface and ground water contamination caused by the Fluorosurfactant AFFF products manufactured by Defendants which were introduced into the stream of commerce. Such costs include all necessary funds to investigate, test, monitor, assess, evaluate, remediate, abate, or contain contamination of its surface and ground water resources that are polluted with PFAS.

PARTIES

A. Plaintiff

27. Plaintiff, OBWD, is a non-profit, locally controlled public water system created by the Massachusetts legislature in 1991 to operate as a self-supporting unit of local government, with its primary address at 96 Vineyard Avenue, P.O. Box 1297, Oak Bluffs, MA 02557.

B. Defendants

28. The term "Defendants" refers to all Defendants named herein jointly and severally.

29. Defendant **3M Company f/k/a Minnesota Mining and Manufacturing Co.** ("3M") is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business located at 3M Center, St. Paul, MN 55144-1000.

30. Beginning before 1970 and until at least 2002, 3M designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

31. Defendant **Dyneon L.L.C.** ("Dyneon") was a limited liability company organized under the laws of the State of Delaware with a principal place of business located at 3M Center Building, 224-FN-40 St. Paul, Minnesota 55144.

32. Dyneon did business throughout the United States, including conducting business in Massachusetts.

33. Dyneon was a wholly owned subsidiary of 3M Company.

34. Dyneon manufactured, sold, marketed, and/or distribute AFFF or fluorosurfactants used in the manufacture of AFFF throughout the United States, including in Massachusetts.

35. According to 3M, Dyneon was, at one point, one of the "world's leading fluoropolymer producers[1]."

[1] *Dyneon to Acquire Empore Solid Phase Extraction Family Products,* 3M COMPANY, (Jan. 5, 2007) *available at* https://news.3m.com/2007-01-05-Dyneon-to-Acquire-Empore-Solid-Phase-Extraction-Family-of-Products (last visited June 20, 2023).

36. Defendant **Amerex Corporation ("Amerex")** is a corporation organized and existing under the laws of the State of Alabama, with its principal place of business located at 7595 Gadsden Highway, Trussville, AL 35173.

37. Amerex is a manufacturer of firefighting products. Beginning in 1971, it was a manufacturer of hand portable and wheeled extinguishers for commercial and industrial applications.

38. In 2011, Amerex acquired Solberg Scandinavian AS, one of the largest manufacturers of AFFF products in Europe.

39. On information and belief, beginning in 2011, Amerex designed, manufactured, marketed distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

40. Defendant **Perimeter Solution, LP** ("Perimeter") is a limited partnership organized and existing under the laws of Delaware, with its principal place of business at 8000 Maryland Avenue, Suite 350, Clayton, Missouri 63105.

41. Perimeter does business throughout the United States, including conducing business throughout Massachusetts.

42. In 2019, Perimeter purchased the Solberg products division of Amerex.

43. Solberg manufactured, sold, and/or distributed fire safety products, including AFFF.

44. Perimeter is the successor-in-interest to Solberg.

45. Perimeter manufactured, sold, marketed, and/or distributed AFF throughout the United States, including Massachusetts.

46. Defendant **Raytheon Technologies Corporation** ("Raytheon") is a corporation organized and existing under the laws of Delaware, with its principal place of business at 10 Farm Springs Road, Farmington, Connecticut 06032.

47. Raytheon conducts business throughout the United States, including throughout Massachusetts.

48. Upon information and belief, United Technologies Corporation merged with Raytheon Company to form Raytheon Technologies in or around April 2020.

49. Raytheon was formerly known as United Technologies Corporation until in or around April 2020.

50. Raytheon manufactured, sold, marketed, and/or distributed AFFF throughout Massachusetts.

51. Defendant **UTC Fire & Security Americas Corporation, Inc** ("UTC") is a Delaware corporation with its principal place of business at 13995 Pasteur Boulevard, Palm Beach Gardens, Florida 33418.

52. Upon information and belief, UTC was a division of United Technologies Corporation.

53. UTC manufactured, sold, marketed, and/or distributed AFFF throughout the United States, including Massachusetts.

54. In April 2005, United Technologies Corporation acquired Kidde plc from the public market. From 2000 to 2005, United Technologies Corporation was the parent company of Kiddle-Fenwal, Inc.

55. Following United Technologies Corporation's acquisition of Kidde plc, United Technologies Corporation combined Kiddle's plc's firefighting business with that of Chubb plc,

an affiliate of Defendant Chubb Fire, Ltd., which United Technologies Corporation acquired in 2003.

56. Chubb Fire, Ltd. Was a corporate affiliate of Kiddle Fenwal, Inc. during the period when it sold AFFF.

57. Defendant **Carrier Global Corporation ("Carrier")** is a corporation organized under the laws of the State of Delaware, with its principal place of business at 13995 Pasteur Boulevard, Palm Beach Gardens, FL 33418.

58. Carrier manufactured, sold, marketed, and/or distributed AFFF through its many divisions and brands, including but not limited to Kidde and UTC.

59. On information and belief, Carrier was formed in March 2020 when United Technologies Corporation spun off its fire and security business before it merged with Raytheon Company in April 2020.

60. On information and belief, Kidde-Fenwal became a subsidiary of Carrier when United Technologies Corporation spun off its fire and security business in March 2020.

61. On information and belief, the AFFF Defendants designed, manufactured, marketed, distributed, and sold AFFF products containing PFOS, PFOA, and/or their chemical precursors.

62. Defendant **Buckeye Fire Equipment Company ("Buckeye")** is a corporation organized under the laws of the State of Ohio, with its principal place of business located at 110 Kings Road, Kings Mountain, NC 28086.

63. On information and belief, Buckeye designed, manufactured, marketed, distributed, and sold AFFF products containing PFAS, including but not limited to PFOA and PFOS.

64. Defendant **National Foam, Inc.** ("National Foam") is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 141 Junny Road, Angier, NC 27501.

65. Beginning in or around 1973, National Foam designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

66. On information and belief, National Foam currently manufactures the Angus brand of AFFF products and is a subsidiary of Angus International Safety Group, a United Kingdom private limited company.

67. Defendant **Angus Fire Armour Corporation** ("Angus Fire") is a corporation organized and existing under the laws of Delaware, with its principal place of business at 141 Junny Road, Angier, North Carolina 27501.

68. Angus Fire manufactured, sold, marketed, and/or distributed AFFF and has done business throughout the United States, including Massachusetts.

69. On information and belief, National Foam merged with Chubb Fire Ltd. to form Chubb National Foam, Inc. in or around 1988.

70. On information and belief, Chubb (defined below) is or has been composed of different subsidiaries and/or divisions, including but not limited to, Chubb Fire & Security Ltd., Chubb Security, PLC, Red Hawk Fire & Security, LLC, and/or Chubb National Foam, Inc. (collectively, "Chubb").

71. On information and belief, Chubb was acquired by Williams Holdings in 1997.

72. On information and belief, Angus Fire Armour Corporation had previously been acquired by Williams Holdings in 1994.

73. On information and belief, Williams Holdings was demerged into Chubb and Kidde P.L.C. in or around 2000.

74. On information and belief, when Williams Holdings was demerged, Kidde P.L.C. became the successor in interest to National Foam System, Inc. and Angus Fire Armour Corporation.

75. On information and belief, Kidde P.L.C. was acquired by United Technologies Corporation in or around 2005.

76. On information and belief, Angus Fire Armour Corporation and National Foam separated from United Technologies Corporation in or around 2013.

77. Defendant **Royal Chemical Company, Ltd**. ("Royal Chemical") is a corporation organized and existing under the laws of Ohio, with its principal place of business at 8679 South Freeway Drive, Macedonia, Ohio 44056.

78. Royal Chemical manufactured, sold, marketed, and/or distributed AFFF throughout the United States, including Massachusetts.

79. Defendant **Verde Environmental, Inc.** a/k/a Micro-Blaze, Inc. ("Verde") is a corporation organized and existing under the laws of Delaware, with its principal place of business at 9223 Eastex Fairway, Houston, Texas 77093.

80. Verde does business throughout the United States, including Massachusetts.

81. Verde manufactured, sold, marketed, and/or distributed AFFF throughout Massachusetts.

82. Defendant **Chemguard, Inc.** ("Chemguard") is a corporation organized under the laws of the State of Texas, with its principal place of business located at One Stanton Street, Marinette, WI 54143.

83. On information and belief, Chemguard designed, manufactured, marketed, distributed, and sold AFFF products containing PFAS, including but not limited to PFOA and PFOS.

84. In 2003, Chemguard acquired the Ciba-Geigy Corporation's fluorosurfactants business.

85. On information and belief, Chemguard was acquired by Tyco International Ltd. in 2011.

86. On information and belief, Tyco International Ltd. later merged into its subsidiary Tyco International plc in 2014 to change its jurisdiction of incorporation from Switzerland to Ireland.

87. Defendant **Tyco Fire Products LP** ("Tyco") is a limited partnership organized under the laws of the State of Delaware, with its principal place of business located at 1400 Pennbrook Parkway Lansdale, Pennsylvania 19446.

88. Tyco is the successor in interest of The Ansul Company ("Ansul"), having acquired Ansul in 1990.

89. Beginning in or around 1975, Ansul designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

90. After Tyco acquired Ansul in 1990, Tyco/Ansul continued to design, manufacture, market, distribute, and sell AFFF products containing PFAS, including but not limited to PFOA and PFOS.

91. Defendant **Arkema Inc.** is a corporation organized and existing under the laws of Pennsylvania, with its principal place of business at 900 First Avenue, King of Prussia, PA 19406.

92. Arkema Inc. develops specialty chemicals and polymers.

93. Arkema, Inc. is an operating subsidiary of Arkema France, S.A.

94. On information and belief, Arkema Inc. designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

95. Defendant **BASF Corporation** ("BASF") is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 100 Park Avenue, Florham Park, NJ 07932.

96. On information and belief, BASF is the successor-in-interest to Ciba. Inc. (f/k/a Ciba Specialty Chemicals Corporation).

97. On information and belief, Ciba Inc. designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

98. Defendant **ChemDesign Products, Inc.** ("ChemDesign") is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 2 Stanton Street, Marinette, WI 54143.

99. On information and belief, ChemDesign designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

100. Defendant **Fire Services Plus, Inc.** ("Fire Services") is a corporation organized and existing under the laws of Georgia, with its principal place of business located at 473 Divided Drive, Peachtree City, Georgia 30269.

101. Fire Services manufactured, sold, marketed, and/or distributed AFFF throughout the State of Massachusetts.

102. Defendant **Deepwater Chemicals, Inc.** ("Deepwater") is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 196122 E County Road 40, Woodward, OK 73801.

103. On information and belief, Deepwater designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

104. Defendant **Daikin America, Inc.** ("Daikin") is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 20 Olympic Drive, Orangeburg, New York 10962.

105. Daikin manufactured, sold, marketed, and/or distributed AFFF or fluorsurfactants used in the manufacture of AFFF throughout the United States, including Massachusetts.

106. Defendant **Dynax Corporation** ("Dynax") is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 103 Fairview Park Drive, Elmsford, NY 10523.

107. On information and belief, Dynax entered into the AFFF market on or about 1991 and quickly became a leading global producer of fluorosurfactants and fluorochemical stabilizers containing PFOS, PFOA, and/or their chemical precursors.

108. On information and belief, Dynax designed, manufactured, marketed, distributed, and sold fluorosurfactants and fluorochemical stabilizers containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

109. Defendant **E.I. du Pont de Nemours & Company** ("Old DuPont") is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 974 Centre Road, Wilmington, DE 19805.

110. Defendant **The Chemours Company** ("Chemours Co.") is a limited liability company organized under the laws of the State of Delaware, with its principal place of business located at 1007 Market Street, P.O. Box 2047, Wilmington, DE 19899.

111. In 2015, DuPont spun off its performance chemicals business to Chemours Co., along with vast environmental liabilities which Chemours Co. assumed, including those related to PFOS and PFOA and fluorosurfactants. On information and belief, Chemours Co. has supplied fluorosurfactants containing PFOS and PFOA, and/or their chemical precursors to manufacturers of AFFF products.

112. On information and belief, Chemours Co. was incorporated as a subsidiary of DuPont as of April 30, 2015. From that time until July 2015, Chemours Co. was a wholly owned subsidiary of DuPont.

113. In July 2015, DuPont spun off Chemours Co. and transferred to Chemours Co. its "performance chemicals" business line, which includes its fluoroproducts business, distributing shares of Chemours Co. stock to DuPont stockholders, and Chemours Co. has since been an independent, publicly traded company.

114. Defendant **The Chemours Company FC, LLC** ("Chemours FC") is a limited liability company organized under the laws of the State of Delaware, with its principal place of business located at 1007 Market Street, Wilmington, DE 19899.

115. Defendant **Corteva, Inc.** ("Corteva") is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business at 974 Centre Rd., Wilmington, DE 19805.

116. Defendant **Dupont de Nemours Inc. f/k/a DowDuPont, Inc.** ("Dupont de Nemours, Inc.") is a corporation organized and existing under the laws of the State of Delaware,

with its principal place of business at 974 Centre Road, Wilmington, DE 19805 and 2211 H.H. Dow Way, Midland, MI 48674.

117. On June 1, 2019, DowDuPont separated its agriculture business through the spin-off of Corteva.

118. Corteva was initially formed in February 2018. From that time until June 1, 2019, Corteva was a wholly owned subsidiary of DowDuPont.

119. On June 1, 2019, DowDuPont distributed to DowDuPont stockholders all issued and outstanding shares of Corteva common stock by way of a pro-rata dividend. Following that distribution, Corteva became the direct parent of E. I. Du Pont de Nemours & Co.

120. Corteva holds certain DowDuPont assets and liabilities, including DowDuPont's agriculture and nutritional businesses.

121. On June 1, 2019, DowDuPont, the surviving entity after the spin-off of Corteva and of another entity known as Dow, Inc., changed its name to DuPont de Nemours, Inc., to be known as DuPont ("New DuPont"). New DuPont retained assets in the specialty products business lines following the above-described spin-offs, as well as the balance of the financial assets and liabilities of E.I DuPont not assumed by Corteva.

122. Defendants E. I. Du Pont de Nemours and Company; The Chemours Company; The Chemours Company FC, LLC; Corteva, Inc.; and DuPont de Nemours, Inc. are collectively referred to as "DuPont" or the "DuPont Defendants" throughout this Complaint.

123. On information and belief, DuPont designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

124. On information and belief, 3M and Chemguard also designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

125. On information and belief, the Fluorosurfactant Defendants designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

126. Defendant **AGC Chemicals Americas, Inc.** ("AGC") is a corporation organized and existing under the laws of the State of Delaware, having its principal place of business at 55 East Uwchlan Avenue, Suite 201, Exton, PA 19341.

127. On information and belief, AGC was formed in 2004 and is a subsidiary of AGC Inc., a foreign corporation organized under the laws of Japan, with its a principal place of business in Tokyo, Japan.

128. AGC manufactures specialty chemicals. It offers glass, electronic displays, and chemical products, including resins, water and oil repellants, greenhouse films, silica additives, and various fluorointermediates.

129. On information and belief, AGC designed, manufactured, marketed, distributed, and sold PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

130. Defendant **Archroma U.S., Inc**. ("Archroma") is a corporation organized and existing under the laws of the State of Delaware, with its a principal place of business at 5435 77 Center Drive, Charlotte, NC 28217.

131. On information and belief, Archroma was formed in 2013 when Clariant Corporation divested its textile chemicals, paper specialties, and emulsions business to SK Capital Partners.

132. On information and belief, Archroma designed, manufactured, marketed, distributed, and sold PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

133. Defendant **Chemicals, Inc.** is a corporation organized and existing under the laws of Texas, with its principal place of business located at 12321 Hatcherville, Baytown, TX 77520.

134. On information and belief, Chemicals, Inc. supplied PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

135. Defendant **Clariant Corporation** ("Clariant") is a corporation organized and existing under the laws of New York, with its principal place of business at 4000 Monroe Road, Charlotte, NC 28205.

136. On information and belief, Clariant is the successor in interest to the specialty chemicals business of Sandoz Chemical Corporation ("Sandoz"). On information and belief, Sandoz spun off its specialty chemicals business to form Clariant in 1995.

137. On information and belief, Clariant supplied PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

138. Defendant **Nation Ford Chemical Co.** ("Nation Ford") is a corporation organized and existing under the laws of South Carolina, with its principal place of business located at 2300 Banks Street, Fort Mill, SC 29715.

139. On information and belief, Nation Ford supplied PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

140. On information and belief, 3M, ChemDesign, Deepwater, and DuPont also supplied PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

141. Specifically, from 1951, Old DuPont, and on information and belief, Chemours, designed, manufactured, marketed, and sold fluorosurfactant products, including Teflon nonstick cookware, and more recently PFAS feedstocks, such as Forafac 1157N, for the use in the manufacture of AFFF products.

142. Based on information and belief, by no later than 2001, Old DuPont manufactured, produced, marketed, and sold fluorosurfactant products and/or PFAS feedstocks containing or degrading into PFOA to some or all of the AFFF product manufacturers for use in their AFFF products that were discharged into the environment and contaminated Plaintiff's Property.

143. Defendant **Honeywell International, Inc.** ("Honeywell International") is a Delaware corporation with its principal place of business located at 855 South Mint Street, Charlotte, North Carolina 28202.

144. Honeywell International manufactured, sold, marketed, and/or distributed AFFF throughout the United States, including in Massachusetts.

145. Defendant **Honeywell Safety Products USA, Inc.** ("Honeywell Safety") is a Delaware corporation with its principal place of business located at 855 South Mint Street, Charlotte, North Carolina 28202.

146. Honeywell Safety manufactured, sold, marketed, and/or distributed AFFF throughout the United States, including in Massachusetts.

147. Honeywell Safety is a wholly owned subsidiary of Honeywell International.

148. On information and belief, the PFC Defendants supplied PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

149. Defendant **Mine Safety Appliances Company, LLC** ("Mine Safety") is a Pennsylvania limited liability company with a principal place of business located at 1000 Cranberry Woods Drive, Cranberry Township, Pennsylvania 16066.

150. Mine Safety manufactured, sold, or distributed AFFF throughout the United States, including Massachusetts.

151. Doe Defendants 1-20 are unidentified entities or persons whose names are presently unknown and whose actions, activities, omissions (a) may have permitted, caused and/or contributed to the contamination of Plaintiff's water sources; or (b) may be vicariously responsible for entities or persons who permitted, caused and/or contributed to the contamination of Plaintiff's water sources; or (c) may be successors in interest to entities or persons who permitted, caused and/or permitted, contributed to the contamination of Plaintiff's water sources. After reasonable search and investigation to ascertain the Doe Defendants' actual names, Doe Defendants' actual identities are unknown to Plaintiff as they are not linked with any Defendants on any public source.

152. Doe Defendants 1-20, either in their own capacity or through a party they are liable for: (1) designed, manufactured, marketed, distributed, and/or sold AFFF products containing PFOS, PFOA, and/or their chemical precursors, and/or designed, manufactured, marketed, distributed, and/or sold the fluorosurfactants contained in AFFF/Component Products; or (2) used,

handled, transported, stored, discharged, disposed of, designed, manufactured, marketed, distributed, and/or sold PFOS, PFOA, and/or their chemical precursors, or other non-AFFF products containing PFOS, PFOA, and/or their chemical precursors; or (3) failed to timely perform necessary and reasonable response and remedial measures to releases of PFOS, PFOA, and/or their chemical precursors, or other non-AFFF products containing PFOS, PFOA, and/or their chemical precursors in to the environment in which Plaintiff's water supplies exist.

153. Defendants, at all times material herein, acted by and through their respective agents, servants, officers and employees, actual or ostensible, who then and there were acting with within the course and scope of their actual or apparent agency, authority or duties. Defendants are liable based on such activities, directly and vicariously.

154. Defendants represent all or substantially all of the market for AFFF/Fluorosurfactant Products in and around Oak Bluffs, Massachusetts.

JURISDICTION AND VENUE

155. This Court has jurisdiction over this action pursuant to 28 U.S.C. § 1332(a) because complete diversity exists between Plaintiff and Defendants and the amount in controversy exceeds $75,000.00.

156. Plaintiff is filing this complaint as permitted by Case Management Order No. 3 ("CMO 3") issued by Judge Richard M. Gergel of this Court. Pursuant to CMO 3, Plaintiff designates the United States District Court for the District of Massachusetts as the "home venue" where Plaintiff would have otherwise filed suit pursuant to 28 U.S.C. § 1391. But for CMO 3, venue is proper in the United States District Court for the District of Massachusetts in that the events or omissions giving rise to the claim occurred in that district. Plaintiff respectfully requests

that, at the time of transfer of this action back to district court for further proceedings, this case be transferred to the United States District Court for the District of Massachusetts.

157. The United States District Court for the District of Massachusetts has personal jurisdiction over the Defendants because at all times relevant to this lawsuit, the Defendants manufactured, designed, marketed, distributed, released, promoted and/or otherwise sold (directly or indirectly) Fluorosurfactant Products, including AFFF, to various locations, such that each Defendant knew or should have known that said products would be delivered to the State of Massachusetts. Therefore, the exercise of jurisdiction over the Defendants by the United States District Court for the District of Massachusetts does not offend traditional notions of fair play and substantial justice.

FACTUAL ALLEGATIONS RELEVANT TO ALL CAUSES OF ACTION

A. Manufacture and Use of Aqueous Film-Forming Foam ("AFFF")

158. AFFF formulations are chemical mixtures used to extinguish hydrocarbon fuel-based fires.

159. AFFF containing fluorinated surfactants have a better firefighting capability than plain water due to their surface-tension lowering properties- essentially smothering the fire and starving it of its oxygen.

160. However, some fluorinated surfactants have unique properties that cause some of the compounds to not biodegrade and to bioaccumulate, and are toxic to animals and humans.

161. AFFF is a Class-B firefighting foam. It is mixed with water and used to extinguish fires that are difficult to fight, particularly those that involve petroleum or other flammable liquids.

162. AFFF was introduced commercially in the mid-1960s and rapidly became the primary firefighting foam in the U.S. and in many parts of the world.

163. AFFF is synthetically formed by combining fluorine free hydrocarbon foaming agents with surfactants. When mixed with water, the resulting solution produces an aqueous film that spreads across the surface of hydrocarbon fuel. This film provides fire extinguishment and is the source of the designation aqueous film forming foam.

164. When used as the Defendants intended and directed, Defendants' AFFF releases PFOA, PFOS, PFHxS, and/or their precursor chemicals into the environment.

165. Defendants manufacture products that contain fluorocarbon surfactants believed to include PFOS, PFOA, and/or certain other PFCs that degrade into PFAS.

166. PFCs are manmade chemicals that do not exist in nature.

167. In the foam industry, concentrates are typically referred to as "3%" or "6%" concentrate, depending on the mixture rate with water. AFFF concentrates contain about 60-90% water and have a fluorine content of about 0.3 – 1.8%.

168. Defendants 3M, Tyco/Ansul, National Foam, Chemguard and Buckeye designed, manufactured, and sold AFFF that was used at in and around Oak Bluffs, Massachusetts, including, but not limited to, National Foam's AER-O-Foam XL-3 3%, used in training operations and for emergency fire-fighting situations.

169. PFCs used in 3M's AFFF were produced by a unique and patented process known as electrochemical fluorination ("ECF"). The ECF process resulted in a product that contains PFOS, some of which degrades into PFOA.

170. 3M was the only company to manufacture PFOS-containing AFFF.

171. In an attempt to limit liability, 3M opted to stop producing PFOS 2002 because it was aware of the looming chemical exposure and health effects on the public.

172. Similarly, PFOA is a man-made, manufactured chemical not found in nature. PFOA was used to make household and commercial products that resist heat and chemical reactions, and has many uses, including repelling oil, stains, grease, and water.

173. In 1947, 3M began producing PFOA via ECF.

174. In 1951, 3M began selling its PFOA to other chemical companies, including DuPont.

175. All other Defendants except 3M manufactured fluorosurfactants for use in AFFF through the process of telomeritzation and/or manufactured AFFF containing fluorosurfactants manufactured through the process of telomerization. Telomerization produces fluorotelomers, including PFOA and/or the chemical precursors to PFOA.

176. For instance, other companies, such as Defendants Tyco/Ansul, Buckeye, National Foam, and Chemguard began manufacturing AFFF using PFOA that they produced themselves or purchased from other companies. Defendants' AFFF was then for use at airports, fire departments, and industrial facilities across the nation.

177. The chemical structure of PFAS makes them resistant to breakdown or environmental degradation. As a result, they are persistent when released into the environment. Some PFAS, such as PFOS and PFOA, have been found to bioaccumulate in humans and animals. In 2005, the U.S. Department of Health and Human Services found that "human exposure to PFOA and PFOS lead to the buildup of these chemicals in the body."

178. AFFF can be made without PFOA, PFOS, PFHxS, or their precursor chemicals.

179. By at least the end of the 1960s, additional research and testing performed by 3M and DuPont Chemical Solutions Enterprise indicated that such materials, including at least PFOA,

because of their unique chemical structure, were resistant to environmental degradation and would persist in the environment essentially unaltered if allowed to enter the environment.

180. Early studies showed that PFC's accumulated in the human body and were "toxic." 3M studies from the 1970s concluded that PFC's were "even more toxic" than previously believed.

181. In 1976, 3M found PFOA was persistent in the blood of its workers. This should have alerted 3M to the same issue raised by findings regarding PFOS in the prior year. 3M communicated its findings to DuPont Chemical Solutions Enterprise, but not to industry regulatory agencies.

182. Upon information and belief, by the 1970's, 3M and DuPont Chemical Solutions Enterprise knew that their PFC's (PFOA and PFOS) were widely present in the blood of the general U.S. population and would accumulate and build up in the blood/body of the exposed individuals with each additional exposure. Upon information and belief, 3M and DuPont Chemical Solutions Enterprise concealed this knowledge from the public and government regulators.

183. In or about 1977, Tyco/Ansul was also aware of the environmental and toxic concerns of its AFFF and undertook a study and investigation on more environmentally improved AFFF.

184. By at least the end of the 1980s, additional research and testing performed by Defendants manufacturing and/or using PFAS materials, including at least 3M and DuPont Chemical Solutions Enterprise, indicated that elevated incidence of certain cancers and other adverse health effects, including elevated liver enzymes and birth defects, had been observed among workers exposed to such materials, including at least PFOA, but such data was not published, provided to governmental entities as required by law, or otherwise publicly disclosed at the time.

185. By at least the end of the 1990s, additional research and testing performed by Defendants manufacturing and/or using PFAS materials, including at least 3M and DuPont Chemical Solutions Enterprise, indicated that at least one such PFAS material, PFOA, had caused a triad of tumors (Leydig cell (testicular), liver and pancreatic) in a second chronic cancer study in rats.

186. PFAS are readily absorbed after consumption, inhalation or dermal absorption, and it accumulates primarily in the blood stream, kidney, and liver.

187. Because of its toxicity, eight major PFOA manufacturers agreed in 2006 to participate in the EPA's PFOA Stewardship Program. The participating companies made voluntary commitments to reduce product content and facility emissions of PFOA and related chemicals by 95%, no later than 2010.

188. PFOA can remain in the environment, particularly in water, for many years and can move through air, soil, and into surface water and groundwater.

189. Human studies show associations between increased PFOA levels in blood and an increased risk of several health conditions, including high cholesterol levels, changes in thyroid hormone, ulcerative colitis (autoimmune disease), pre-eclampsia (a complication of pregnancy that includes high blood pressure), and kidney and testicular cancer.

190. These injuries can arise months or years after exposure to PFOA.

191. According to the EPA's Lifetime HAs, the adverse health effects observed following exposure to PFOS are the same as those observed with PFOA, meaning injuries associated with PFOS exposure and accumulation similarly manifest themselves months or years after initial exposure.

192. Due to the extreme persistence of PFAS in the environment, these chemicals' toxicity, mobility, and bioaccumulation potential pose ongoing and probable adverse effects to human health and the environment.

193. Consumption of elevated levels of PFAS from contaminated water will lead to elevated serum PFAS levels with evidence that for every 10 ppt consumed from contaminated water, serum levels increase by 25%, thereby causing a doubling of serum levels at 40 ppt. Once biological uptake occurs, the clinical effect can be proximate to the exposure or following a latency or both.

B. Health Advisories and Health Effects relating to PFOS and PFOA

194. Many parties have studied PFOS and PFOA, sometimes referred to as C8, including a Science Panel formed out of a class action settlement arising from contamination from DuPont's Washington Works located in Wood County, West Virginia.

195. The C8 panel consisted of three epidemiologists specifically tasked with determining whether there was a probable link between PFOA exposure and human diseases. In 2012, the panel found probable links between PFOA and kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, pregnancy induced hypertension (including preeclampsia), and hypercholesterolemia.

196. The non-cancer health effects of PFOS are the same as PFOA.

197. In the May 2015 "Madrid Statement on Poly- and Perfluoroalkyl Substances (PFAS's)," scientists and other professionals from a variety of disciplines, concerned about the production and release into the environment of PFOA, called for greater regulation, restrictions, limits on the manufacture and handling of any PFOA containing product, and to develop safe non-

fluorinated alternatives to these products to avoid long-term harm to human health and the environment.[2]

198. On May 25, 2016, the EPA released a lifetime health advisory (HAL) and health effects support documents for PFOS and PFOA.[3] The EPA developed the Has to assist governmental officials in protecting public health when PFOS and PFOA are present in drinking water. The EPA HAL identified the concentration of PFOS and PFOA in drinking water at or below which adverse health effects are not anticipated to occur over a lifetime of exposure at 0.07 ppb or 70 ppt. The HAL were based on peer-reviewed studies of the effects of PFOS and PFOA on laboratory animals (rats and mice) and were also informed by epidemiological studies of human populations exposed to PFOSs. These studies indicate that exposure to PFOS and PFOA over these levels may result in adverse health effects, including:

a. Developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations);

b. Cancer (testicular and kidney);

c. Liver effects (tissue damage);

d. Immune effects (e.g., antibody production and immunity); and/or

e. Thyroid disease and other effects (e.g., cholesterol changes).

[2] Blum A, Balan SA, Scheringer M, Trier X, Goldenman G, Cousins IT, Diamond M, Fletcher T, Higgins C, Lindeman AE, Peaslee G, de Voogt P, Wang Z, Weber R. 2015. The Madrid statement on poly- and perfluoroalkyl substances (PFASs). Environ Health Perspect 123:A107–A111; http://dx.doi.org/10.1289/ehp.1509934.

[3] *See* Fed. Register, Vol. 81, No. 101, May 25, 2016, Lifetime Health Advisories and Health Effects Support Documents for Perfluorooctanoic Acid and Perfluorooctane Sulfonate.

199. Many states, however, have issued lower regulatory limits. For example, Vermont has set a combined level of 20 ppt for PFOA and PFOS and New Jersey has set a maximum contaminant level ("MCL") of 14 ppt for PFOA.

200. On October 2, 2020, the Massachusetts Department of Environmental Protection ("MassDEP") published its PFAS public drinking water standard MCL of 20 ppt for a group of six PFAS.

201. In addition, PFOS and PFOA are hazardous materials because they pose a "present or potential threat to human health."[4]

202. On May 2, 2012, the EPA published its Third Unregulated Contaminant Monitoring Rule ("UCMR3"), requiring public water systems nationwide to monitor for thirty contaminants of concern between 2013 and 2015. PFOS and PFOA are such contaminants.[5]

203. In 2016, the National Toxicology Program of the United States Department of Health and Human Services ("NTP") and the International Agency for Research on Cancer ("IARC") both released extensive analyses of the expanding body of research regarding the adverse effects of PFCs. The NTP concluded that both PFOA and PFOS are "presumed to be an immune hazard to humans" based on a "consistent pattern of findings" of adverse immune effects in human (epidemiology) studies and "high confidence" that PFOA and PFOS exposure was associated with suppression of immune responses in animal (toxicology) studies.[6]

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[4] *Id*; *see also, National Ass'n for Surface Finishing v. EPA*, 795 F.3d 1, 3, 6 (D.C. Cir. 2015) (referring to PFOS as a "toxic compound" and a "hazardous chemical.").

[5] *See Revisions to the Unregulated Contaminant Monitoring Regulation (UCMR 3) for Public Water Systems*, 77 Fed. Reg: 26072 (May 2, 2012).

[6] *See* U.S. Dep't of Health and Human Services, Nat'l Toxicology Program, *NTP Monograph: Immunotoxicity Associated with Exposure to Perfluorooctanoic Acid or Perfluorooctane Sulfonate* (Sept. 2016), at 1, 17, 19, https://ntp.niehs.nih.gov/ntp/ohat/pfoa_pfos/pfoa_pfosmonograph_508.pdf.

204. The IARC concluded that there is "evidence" of "the carcinogenicity of . . . PFOA" in humans and in experimental animals, meaning that "[a] positive association has been observed between exposure to the agent and cancer for which a causal interpretation is . . . credible."[7]

205. California has listed PFOA and PFOS to its Proposition 65 list as a chemical known to cause reproductive toxicity under the Safe Drinking Water and Toxic Enforcement Act of 1986.

206. The United States Senate and House of Representatives passed the National Defense Authorization Act in November 2017, which included $42 Million to remediate PFC contamination from military bases, as well as devoting $7 Million toward the Investing in Testing Act, which authorizes the Center for Disease Control and Prevention ("CDC") to conduct a study into the long-term health effects of PFOA and PFOS exposure.

207. In June 2018, the Agency for Toxic Substances and Disease Registry ("ATSDR") and EPA released a draft toxicological profile for PFOS and PFOA and recommended the drinking water advisory levels be lowered to 11 ppt for PFOA and 7 ppt for PFOS.

208. On June 15, 2022, the EPA released four drinking water health advisories for PFAS (that replace those that the EPA issued in 2016):[8]

a. Interim updated health advisory for PFOA = .004 ppt

b. Interim updated health advisory for PFOS = .02 ppt

c. Final health advisory for GenX chemicals = 10 ppt

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[7] *See* Int'l Agency for Research on Cancer, IARC Monographs: *Some Chemicals Used as Solvents and in Polymer Manufacture* (Dec. 2016), at 27, 97, http://monographs.iarc.fr/ENG/Monographs/vol110/mono110.pdf.

[8] *See* "Technical Fact Sheet: Drinking Water Health Advisories for Four PFAS (PFOA, PFOS, GenX chemicals, and PFBS)," EPA 822-F-22-002, available at https://www.epa.gov/newsreleases/epa-announces-new-drinking-water-health-advisories-pfas-chemicals-1-billion-bipartisan (last visited June 16, 2023).

d. Final health advisory for PFBS = 2,000 ppt

209. On September 6, 2022, the EPA published a notice of proposed rulemaking seeking public comment on its plan to designate PFOS and PFOA as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA").[9]

210. On March 14, 2023, the EPA announced the proposed National Primary Drinking Water Regulation ("NPDWR") for six PFAS (PFOS, PFOA, PFHxS, GenX chemicals, PFNA, AND PFBS).[10] The NPDWR set a proposed MCL at 4.0 ppt.[11] EPA anticipates finalizing the regulation by the end of 2023.[12]

211. In addition to establishing an MCL, the aforementioned EPA proposed regulation will require water systems in the United States to monitor for the six PFAS quarterly, notify the public if monitoring detects PFAS at levels above the MCL, and, if above the MCL, take action to reduce PFAS levels in drinking water (e.g., utilize treatment options or switch to an alternative water supply that is below the MCL).[13]

C. Defendants' Knowledge of the Threats to Public Health and the Environment Posed by PFAS and PFOA

212. Old Dupont had been studying the potential toxicity of PFOA since at least the 1960s and knew it was contaminating drinking water drawn from the Ohio River and did not

[9] *See* Designation of Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) as CERCLA Hazardous Substances, 87 Fed. Reg. 54415 (Sept. 6, 2022).
[10] EPA, National Primary Drinking Water Regulations, *available at* https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulation-table (last visited June 16, 2023).
[11] *Id*.
[12] *Id*.
[13] *Id*.

disclose to the public or to government regulators what they knew about the substance's potential effects on humans, animals, or the environment.[14]

213. On information and belief, by at least the 1970s Defendants knew or should have known, among other things, that (a) PFOA and PFOS are toxic; and (b) when sprayed in the open environment per the instructions given by the manufacturer, PFOA, PFOS and other PFAS are mobile and persistent, readily migrate through the subsurface, mix easily with groundwater, resist natural degradation, render drinking water unsafe and/or non-potable, and can be removed from public drinking water supplies only at substantial expense.

214. Upon information and belief, Defendants concealed from the public and government agencies its knowledge of the risk of harm posed by PFAS.

215. In 1975, Defendant 3M concluded that PFOS was present in the blood of the general population. Since PFOA and PFOS are not naturally occurring, this finding should have alerted 3M and the other Defendant manufacturers to the possibility that their products were a source of this PFOS. The finding also should have alerted 3M to the possibility that PFOS might be mobile, persistent, bioaccumulative, and biomagnifying, as those characteristics could explain the absorption of PFOS in blood from 3M's products.

216. In 1976, Defendant 3M found PFOA in the blood of its workers. This finding should have alerted 3M and the other Defendant manufacturers to the same issues raised by the findings regarding PFOS in the prior year.

217. A 1978 study by 3M showed that PFOA reduced the survival rate of fathead minnow fish eggs.

[14] *See*, *e.g.,* Fred Biddle, "DuPont confronted over chemical's safety," *Wilmington News Journal* (Apr. 13, 2003). The *Wilmington News Journal* is published in Wilmington, Ohio.

218. Other studies by 3M in 1978 showed that PFOS and PFOA are toxic to rats, and that PFOS is toxic to monkeys. In one study in 1978, all monkeys died within the first few days of being given food contaminated with PFOS.

219. Studies by 3M after the 1970s also showed adverse effects from exposure to PFOA and PFOS.

220. In a 1983 study, for example, 3M found that PFOS caused the growth of cancerous tumors in rats.

221. A study proposal by 3M in 1983 stated that the resistance to degradation of PFOS and PFOA made them "potential candidates for environmental regulations, including further testing requirements under laws such as the Toxic Substances Control Act." 3M Environmental Laboratory (EE & PC), Fate of Fluorochemicals - Phase II, at p.6 (E. A. Reiner, ed. May 20, 1983).

222. A 1997 material safety data sheet ("MSDS") for a non-AFFF product made by 3M listed its only ingredients as water, PFOA, and other per-fluoroalkyl substances and warned that the product includes "a chemical which can cause cancer." The MSDS cited "1983 and 1993 studies conducted jointly by 3M and DuPont" as support for this statement. On information and belief, 3M's MSDSs for AFFF did not provide similar warnings.

223. Federal law requires chemical manufacturers and distributors to immediately notify the EPA if they have information that "reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment." Toxic Substances Control Act ("TSCA") § 8(e), 15 U.S.C. § 2607(e).

224. 3M did not comply with its duty under TSCA, and in April 2006 it agreed to pay EPA a penalty of more than $1.5 million for its failure to disclose studies regarding PFOS or PFOA and other per-fluoroalkyl substances dating back decades, among other things.

225. By December 2005, the EPA uncovered evidence that DuPont concealed the environmental and health effects of PFOA, and the EPA announced the "Largest Environmental Administrative Penalty in Agency History."[15] The EPA fined DuPont for violating the Toxic Substances Control Act "Section 8(e)—the requirement that companies report to the EPA. substantial risk information about chemicals they manufacture, process or distribute in commerce."[16]

226. By July 2011, Old DuPont could no longer credibly dispute the human toxicity of PFOA, which it continued to manufacture. The "C8 Science Panel" created as part of the settlement of a class action over Old DuPont's releases from the Washington Works plant had reviewed the available scientific evidence and notified Old DuPont of a "probable link" between PFOA exposure and the serious (and potentially fatal) conditions of pregnancy-induced hypertension and preeclampsia.[17] By October 2012, the C8 Science Panel had notified Old DuPont of a probable link between PFOA and five other conditions—high cholesterol, kidney cancer, thyroid disease, testicular cancer, and ulcerative colitis.

227. In July 2015, Old DuPont spun off its chemicals division by creating Chemours as a new publicly-traded company, once wholly owned by Old DuPont. By mid-2015, Old DuPont had dumped its perfluorinated chemical liabilities into the lap of the new Chemours.

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[15] U.S. Envtl. Prot. Agency, Reference News Release, "EPA Settles PFOA Case Against DuPont for Largest Environmental Administrative Penalty in Agency History" (Dec. 14, 2005), *available at* https://www.epa.gov/archive/epapages/newsroom_archive/newsreleases/fdcb2f665cac66bb852570d7005d6665.html#:~:text=(Washington%2C%20D.C.%2DDec.,to%20comply%20with%20federal%20law. (last visited June 16, 2023).

[16] *Id.*

[17] *See* The C8 Science Panel, Status Report: PFOA (C8) exposure and pregnancy outcome among participants in the C8 Health Project (July 15, 2011), *available at* http://www.c8sciencepanel.org/pdfs/Status_Report_C8_and_pregnancy_outcome_15July2011.pdf (last visited June 16, 2023).

228. On information and belief, all Defendants knew or should have known that in its intended and/or common use, AFFF containing PFOA or PFOS would very likely injure and/or threaten public health and the environment. On information and belief, this knowledge was accessible to all defendants. For example, in 1970 a well-established firefighting trade association was alerted to the toxic effects on fish of a chemical compound related to PFOS. On information and belief, at least the following Defendants are and/or were members of this trade association: 3M, Tyco/Ansul, Chemguard, and National Foam/Angus.

229. Additionally, on information and belief, all Defendants knew or should have known that their AFFF and/or chemical feedstocks and the PFOA and PFOS the products contained, easily dissolve in water, because the products were designed to be mixed with water; are mobile, because the products were designed to quickly form a thin film; resist degradation, because that is the nature of the products' chemical composition, and on information and belief the products had long shelf-lives; and tend to bioaccumulate, because studies regarding the presence of substances with carbon-fluorine bonds in the blood of the general population were publicly available beginning in at least 1976.

230. The Defendants failed to warn and share information with their customers regarding the danger of their products to the quality of unprotected water sources.

231. Defendants' products created major waste management problems which they absolved themselves of, providing their customers with no practical guidance and instructions on how to deal with Fluorosurfactant Product, specifically AFFF, waste.

232. Some or all of the Defendants understood how stable the fluorinated surfactants used in their AFFF formulations are when released into the environment from the first sale to their customers but none warned customers nor provided reasonable instruction on how to manage

wastes generated from use of their products. The persistence and contaminating nature of the perfluorinated surfactant 3M made that went into its AFFF products was well understood prior to the commercial applications of these surfactants at 3M's Cottage Grove facility in Minnesota.

233. The inventor of 3M's surfactants was J. H. Simons. Simons' 1948 patent (Simons[18]) reports: PFCs are "non-corrosive, and of little chemical reactivity"; "do not react with any of the metals at ordinary temperatures and react only with the more chemically reactive metals such as sodium, at elevated temperatures."

234. Simons reported that the surfactants that 3M specified for its AFFF do not react with other compounds or reagents due to the blanket of fluorine atoms surrounding the carbon skeleton of the molecule. These highly stable chemicals were developed to provide non-reactive solid and liquid chemicals with low surface tensions that could withstand high temperatures and would not react with highly reactive materials such as oxygen (see Simons[19], Bryce[20]). 3M understood that the stability of the carbon-to-fluorine bonds and the lack of attraction for other chemical species prevent these surfactants from undergoing further chemical reactions or degrading under natural processes in the environment (see Simons 1950 published work[21]).

235. Bryce, an employee of 3M, published an authoritative treatise stating "[t]his chemical stability also extends itself to all types of biological processes; there are no known biological organisms that are able to attack the carbon-fluorine bond in a fluorocarbon." (Bryce (1964)).

[18] Simons, J. H., U.S. Patent No. 2,447,717. August 24, 1948.
[19] Simons, J. H., 1949. Fluorocarbons. Scientific American, Inc., 181(5): 44-47.
[20] Bryce, H. G., 1964. Industrial and Utilitarian Aspects of Fluorine Chemistry. Fluorine Chemistry. 5(4): 295-498.
[21] Simons, J. H., 1950. Fluorocarbons and Their Production. Fluorine Chemistry, 1(12): 401-422.

236. The thermal stability of 3M's surfactants was understood prior to commercial production. In 1947, two researchers reported that fluorocarbon compounds did not degrade at temperatures as high as 500º C (932ºF), even in the presence of catalytic materials (Grosse, et al.[22]). Simons' patent application further discloses that the chemicals he invented were thermally stable at temperatures up to 750° C (1382º F) (see Simons (1948); Simons et al., (1949)). These chemicals are non-reactive and thermally stable due to the strength and stability of the carbon-to-fluorine bonds (Simons (1949); Bryce (1950)[23]). Additional research by 3M expanded the understanding of the thermal stability of perfluorocarbon compounds. Bryce explained that the fracture of the carbon-to-carbon bonds may take place at very high temperatures from 600 to 1000º C (1112 to 1832º F) depending on the carbon chain length. He also reported that the carbon-to-fluorine bond is much stronger and can require temperatures of 1200° C (2192º F) to break (Bryce, 1964).

237. Nowhere in any Material Safety Data Sheet for any of the Defendants' products is information on the thermal stability of their surfactants disclosed. Failure to disclose knowledge of how stable the chemical ingredients in the AFFF product are to customers is a failure to warn just how indestructible the surfactant ingredients are when released to unprotected water sources and even treatment plants. The remarkable thermal stability of the surfactants used in Defendants' formulations means that there is a risk that the customer has to deal with because the surfactant ingredients are incredibly stable. The surfactant additive is so stable that it is indestructible under

[22] Grosse, A. V., et al., 1947. Properties of Fluorocarbons. Industrial and Engineering Chemistry, 39(3): 367-374. March.

[23] Bryce, T. J., 1950. Fluorocarbons - Their Properties and Wartime Development. Fluorine Chemistry, 1(13): 423-462.

normal use and environmental conditions; facts which are known by AFFF chemical feedstock manufacturers and not apparent to the users of these products.

238. Defendant 3M was capable of producing a variety of perfluorinated products at its Cottage Grove facility (PFOS, PFOA, and PFBA, in addition to the salts of PFOS, PFOA, and PFBA). All of these surfactants were understood by 3M to readily dissolve in water. In 1962, testing of PFOS-based surfactants indicated that these compounds were very soluble (Guenthner, et al.[24]). Numerous PFCs manufactured by 3M, including fluorocarbon carboxylic acids and fluorocarbon sulfonic acids such as PFOA and PFOS readily dissolve when mixed with water (Bryce (1964)). 3M knew by 1964 that when dissolved, fluorocarbon carboxylic acids and fluorocarbon sulfonic acids dissociated to form highly stable perfluorocarboxylate and perfluorosulfonate ions (Bryce (1964)). Later studies by 3M on the adsorption and mobility of FC-95 and FC-143 (the ammonium salt of PFOA) in soils indicated very high solubility and very high mobility in soils for both compounds.[25]

239. Defendant 3M understood from the earliest days it acquired the Simons' patents that the surfactants it commercialized had extremely limited reactivity and that the high thermal stability of the perfluorinated carbon chain inhibited degradation in the environment (Bryce, 1950). The breaking of a carbon-to-fluorine bond requires the input of large amounts of energy to overcome the chemical bond between carbon and fluorine. Chemical and physical processes occurring in nature lack sufficient energy to break carbon-to-fluorine bonds and without this input of energy, the carbon-to-fluorine bonds remain intact.

[24] Guenthner, R. A., et al., 1962. Surface Active Materials From Perfluorocarboxylic and Perfluorosulfonic Acids, 1(3): 165-168.
[25] 3M, 1978 [3MA10036129].

240. Bryce wrote, "This chemical stability also extends itself to all types of biological processes; there are no known biological organisms that are able to attack the carbon-fluorine bond in a fluorocarbon" (Bryce, 1964). 3M understood the chemical stability of the carbon-to-fluorine bond; it knew that its surfactants were immune to chemical and biological degradation in soils and groundwater.

241. A 1971 internal memo by H.G. Bryce states that "the thesis that there is 'no natural sink' for fluorocarbons obviously demands some attention." Hence, 3M understood at the very least that when its AFFF product was released to the environment, it would essentially never degrade.[26]

242. In natural environments, the surfactants do not undergo degradation of the carbon-to-fluorine bonds of the perfluorinated carbon chain. The non-fluorinated, functional group of the chemical will partially degrade, yielding recalcitrant products such as PFOS, PFOA, and PFBA, which then resist further degradation. Basic weathering and degradation reactions, such as hydrolysis, occur at the non-fluorinated, functional group end of the molecule, producing the original fluorocarbon compound (Pearlson[27]). Depending on the surfactant these reduce to PFOS, PFOA, or PFBA.

243. Defendant 3M knew that the perfluorinated components in its AFFF product(s) when released to the environment would not degrade the perfluorinated carbon structure, but would remain intact and persist (Bryce, 1950). Nearly 30 years later and after the establishment of a robust market of AFFFs using such ingredients, Defendant 3M finally got around to looking at the environmental risks its products pose. A 1979 3M study reports on its surfactant FC95, citing

[26] 3M, 1971 [3MA02496587].
[27] Pearlson, W. H., 1950. Fluorocarbon Derivatives. Fluorine Chemistry, 1(14): 463-522.

multiple studies on toxicity and biodegradability. [28] The study reports that "F-95 was found to be completely resistant to biological test conditions… it appears that waterways are the environmental sink for FC95… ." [29]

244. A 1978 3M biodegradation study reports "… the results of the quite extensive study strongly suggests that FM3422 is likely to persist in the environment for extended period unaltered by metabolic attack." [30]

245. 3M and other defendants chose not to disclose their knowledge of the inability of their surfactants to break down in the natural environment. They failed to warn that their products can contaminate drinking water sources for many decades despite their knowledge that this was a likely outcome from the use of their products.

246. All of the Defendants are sophisticated and knowledgeable in the art and science of formulating AFFF products and/or chemical feedstocks. They understood far more about the properties of and the biodegradability of their additives than any customer. They chose not to use their knowledge to design safer products. *See* Ansul [31] which wrote the following about the biodegradation of AFFF: Biodegradation is a "measure of how completely a substance breaks down in the environment. The biodegradability of a chemical is expressed as a percentage determined by dividing the BOD by the COD and multiplying by 100. The chemical oxygen demand, COD, is the amount of oxygen needed to completely break a chemical down to its most oxidized state (for example: CO2, H2O, and HF) and is a measured analytical value. The biochemical oxygen demand, BOD, is an empirical test that measures a relative oxygen

[28] 3MA10066577.
[29] *Id*.
[30] 3MA00717615.
[31] Ansul Inc., Environmental Aspects of AFFF and AR-AFFF, White Paper 1017, 2003.

requirement. This test measures the oxygen required for the biochemical degradation of organic and inorganic material… For firefighting foams, this test is conducted for 20 days as opposed to the usual five days for other chemicals because the bacteria require a longer time to acclimate to the test solution of the foam… [b]iodegradation is the percentage ratio of BOD/COD. If that resulting number is higher than 50%, the chemical is determined to be readily biodegradable. If it is below 15%, the chemical is determined to be not biodegradable. Ansul summarized its explanation by noting: If BOD/COD > 50%, then biodegradable; If BOD/COD < 15%, then NOT biodegradable.

247. The information that Ansul published and widely distributes to its customers is both misleading and deceitful. Ansul's explanation ignores the fact that while the foam stabilizer additives biodegrade, perfluorinated surfactants do not. Dimitrov, et al.[32] report that PFAS when present in the environment does not undergo any further chemical, microbial or photolytic degradation or breakdown. Long before Dimitrov, 3M understood this as shown by its explanation of biodegradability in a 1976 study, noting that hydrocarbon components of a perfluorinated admixture will degrade leaving behind the perfluorinated components which do not biodegrade.[33] Once these substances undergo biotic or abiotic degradation, the perfluorinated moiety that remains will be PFOS. The rate of degradation to PFOS is not considered significant and over time these substances are all expected to degrade in the environment to environmentally persistent PFOS. These were facts that were known by 3M in the 1960s. These were facts that other AFFF chemical feedstock manufacturers knew or should have known; and if they didn't then they simply

[32] *Ib*., Dimitrov, S., et al. 2004.
[33] 3MA01252037.

created their products blindly and without concern as to whether they could cause harm to unprotected water resources and place communities at risk.

248. Defendant 3M, along with Defendant Ansul and others, had intimate understanding of the poor biodegradation of their fluorochemical compounds. A 1976 study, for example, observed no biodegradation of FC-95, the potassium salt of PFOS. 3M characterized the result of the study "unsurprising" in light of the fact that "[b]iodegradation of FC 95 is improbable because it is completely fluorinated".[34]

249. The Ansul Company (Tyco), published a report in 1977 titled "Environmentally Improved AFFF."[35] This report acknowledges that AFFFs were understood to be environmentally damaging and could pose potential negative impacts to water quality. Ansul wrote: "The purpose of this work is to explore the development of experimental AFFF formulations that would exhibit reduced impact on the environment while retaining certain fire suppression characteristic…improvements [to AFFF formulations] are desired in the environmental area, i.e., development of compositions that have a reduced impact on the environment without loss of fire suppression effectiveness."[36] Its study showed it had the ability to reformulate its AFFF products to be biodegradable, but there is no evidence that any company bothered to do so.

250. Also, in 1979 Defendant 3M carried out a comprehensive biodegradation and toxicity study covering investigations between 1975 and 1978.[37] More than 10 years after 3M began selling its AFFF products it wrote "there has been a general lack of knowledge relative to

[34] 3M, 1976 [3MA01252037].
[35] Ansul Co., Final Report: Environmentally Improved AFFF, N00173-76-C-0295, Marinette, WI, Dec. 13, 1977.
[36] *Id.*
[37] 3MA00326828.

the environmental impact of these chemicals," and ominously disclosed, "[i]f these materials are not biodegradable, what is their fate in the environment?"[38]

251. Defendants failed to comply with their obligations to notify EPA about the "substantial risk of injury to health or the environment" posed by their AFFF products containing PFOS/A. See TSCA § 8(e).

D. Old Dupont's Fraudulent Plans to Shield its Assets From its PFAS Liabilities

252. By 2013, Old DuPont faced mounting liabilities arising out of its long-running manufacture, use, marketing, distribution, and sale of PFOA and/or its chemical precursors throughout the country. These liabilities included, among other things, clean-up costs, remediation obligations, tort damages, natural resources damages, and potential punitive damages.

253. Upon information and belief, by 2013, in order to shield its assets from these liabilities and make itself a more appealing merger partner, Old DuPont began to consider and/or engage in a complex series of corporate restructurings and spin-offs.

254. In or around 2014, Old DuPont formed The Chemours Company as a wholly-owned and operated subsidiary. Shortly thereafter, Old DuPont transferred its "Performance Chemicals" business (which included Teflon® and other products, the manufacture of which involved the use of PFOA and other PFAS) to Chemours.

255. At the time of the transfer of its Performance Chemicals business to Chemours, Old DuPont had been sued, threatened with suit, and/or had knowledge of the likelihood of litigation to be filed regarding Old DuPont's liabilities for damages and injuries arising from its manufacture and sale of its PFAS products, including PFOA and its chemical precursors.

[38] *Id.*

256. Upon information and belief, prior to the spinoff, Chemours was a wholly-owned subsidiary of Old DuPont and its four-member Board of Directors consisted of three Old DuPont employees and a former member of Old DuPont's Board of Directors. Then, effective immediately prior to the spinoff, the Chemours Board of Directors doubled in size, the three Old DuPont employees resigned, and seven new members were appointed to fill the vacancies. This new Chemours Board of Directors did not take part in negotiating the Separation Agreement.

257. In or around July 1, 2015, Old DuPont completed the spin-off Chemours as a separate public entity and saddled Chemours with Old DuPont's massive PFAS liabilities.

258. Although many of the details of the Separation Agreement remain largely hidden from the public, upon information and belief, as part of the Separation Agreement, Chemours accepted broad assumption of Old DuPont's environmental liabilities arising out of its long-running manufacture, use, discharge, marketing, distribution, and sale of PFAS.

259. Additionally, Chemours agreed to assume for itself and indemnify Old DuPont against all liabilities relating to or arising from the operation of the Performance Chemicals business at any time and regardless of which entity is named in any action or against whom such liabilities are asserted or determined.

260. Further, Chemours agreed to assume for itself and indemnify Old DuPont from all environmental liabilities that arose prior to the spinoff if Old DuPont reasonably determined that 50.1% of the liabilities were attributable to the Performance Chemicals business.

261. Upon information and belief, the value of the assets Chemours transferred to Old DuPont was substantially more than the value of the assets it received from Old DuPont, and Chemours assumed billions of dollars of Old DuPont's PFAS and other liabilities.

262. Old DuPont knew that Chemours was undercapitalized and unable to satisfy the massive liabilities that it assumed from Old DuPont. In addition to the assumption of such liabilities, Chemours was required to provide broad indemnification to Old DuPont in connection with these liabilities, which is uncapped and does not have a survival period.

263. In or around December 2015, Old DuPont entered into an agreement with Dow, Inc. ("Old Dow") pursuant to which Old DuPont and Old Dow merged with subsidiaries of a newly formed holding company, DowDuPont, Inc. ("DowDuPont"), which was created solely for the purpose of effectuating the merger. Old DuPont and Old Dow became subsidiaries of DowDuPont.

264. Following its creation, DowDuPont engaged in a number of realignments and divestitures, the details of which remain largely hidden from Plaintiff and other creditors, intended to frustrate and/or hinder creditors with claims against Old DuPont. Upon information and belief, the net effect of these transactions was the transfer, directly or indirectly, of a substantial portion of Old DuPont's assets to DowDuPont for far less than these assets were worth.

265. By 2019, DowDuPont spun-off two new publicly traded companies, Corteva, Inc. and Dow, Inc. ("New Dow"). DowDuPont was then renamed DuPont de Nemours, Inc. ("New DuPont").

266. Upon information and belief, Corteva currently holds Old DuPont as a subsidiary.

267. Upon information and belief, as part of the DowDuPont Separation Agreement, Corteva and New DuPont also assumed direct financial liability of Old DuPont that was not related to the Agriculture, Material Science, or Specialty Products Businesses, including the PFAS liabilities which are allocated on a pro rata basis between Corteva and New DuPont.

E. The Impact on Plaintiff's Water Supply, Treatment Facilities, and Distribution Systems

268. AFFF Contamination poses a serious threat to human health and Plaintiff's water supply and property.

269. Surface and ground waters are precious limited, and invaluable natural resources that are used for drinking water and are vital to the health, safety, and welfare of residents serviced by Plaintiff.

270. Surface waters such as lakes, rivers, and wetlands can receive groundwater inflow and recharge groundwater. The movement of water between ground water and surface-water systems leads to the mixing of their water qualities.

271. Upon information and belief, at all times pertinent herein, Defendants' Fluorosurfactant Products have been released, used, stored and/or disposed of at, near, and/or in the vicinity of the Plaintiff's Property, including Plaintiff's water supply sources. During these activities, Defendants' Fluorosurfactant Products were released, used, stored, cleaned up, and/or disposed of as directed and intended by the Defendants, which allowed PFAS to enter the environment, and migrate through the surface water, thereby contaminating Plaintiff's Property and drinking water supply wells.

272. PFAS have been detected in varying amounts, at varying times in Plaintiff's Property. PFOA, PFOS, and PFBS have been detected and/or are present in certain areas of Plaintiff's Property. PFOA, PFOS, and PFBS have been detected at Plaintiff's Property at levels that are greater than the current Federal Advisory Levels. The detection and/or presence of PFOA, PFOS, and PFBS, and the threat of further detection and/or presence of PFOA, PFOS, and PFBS in Plaintiff's Property in varying amounts and at varying times has resulted, and will continue to result, in significant costs, injuries and damage to Plaintiff.

273. Upon information and belief, the invasion of Plaintiff's Property with PFOA, PFOS, and PFBS is recurring, resulting in new harm to Plaintiff on each occasion.

274. Defendants have contaminated and injured drinking water that is drawn from surface and ground water sources and at additional locations yet to be determined with AFFF contamination.

275. The injuries to Plaintiff caused by Defendants' conduct and fluorosurfactant products, including but not limited to AFFF, constitute an unreasonable interference with, and damage to, Plaintiff and Plaintiff's Property. Plaintiff's interests in protecting its property constitute a reason for seeking damages sufficient to restore such Property to its pre-contamination condition, in addition to the other damages sought herein.

CAUSES OF ACTION

COUNT I:
Breach of Implied Warranty of Merchantability (Defective Design)
(Against all Defendants)

276. Plaintiff repeats and restates the allegations set forth in the previous paragraphs as if fully restated in this cause of action.

277. At all times relevant herein, Defendants were engaged in the business of researching, designing, manufacturing, testing, marketing, distributing, and/or selling AFFF containing PFAS. By doing so, Defendants impliedly warranted that AFFF was merchantable, safe, and fit for ordinary purposes for which it was used, including for firefighting training and exercises.

278. It was reasonably foreseeable that the AFFF containing PFAS that Defendants manufactured and/or distributed and sold would be used in and around Oak Bluffs.

279. It was reasonably foreseeable that Defendants AFFF containing PFAS would contaminate Plaintiff's Property, soil, and the ground water under and around Plaintiff's Property and cause damages.

280. Defendants' AFFF products were manufactured for placement into trade or commerce.

281. Defendants marketed and sold AFFF for use in controlling and extinguishing aviation, marine, fuel, and other shallow spill fires.

282. As manufacturers, Defendants owed a duty to all persons whom its products might foreseeably harm, including Plaintiff, not to market any product which is unreasonably dangerous in design for its reasonably anticipated use.

283. By manufacturing and selling AFFF containing PFAS, Defendants warranted that such AFFF was merchantable, safe, and fit for ordinary purposes.

284. Defendants breached that warranty because their AFFF containing PFAS products were unreasonably dangerous for their reasonably anticipated uses for the following reasons:

a. PFAS causes extensive groundwater contamination, even when used in its foreseeable and intended manner;

b. Even at extremely low levels, PFAS render drinking water unfit for consumption;

c. PFAS poses significant threats to public health; and

d. PFAS create real and potential environmental damage.

285. Defendants knew of these risks and failed to use reasonable care in the design of their AFFF products.

286. The AFFF as manufactured and/or sold by Defendants reached Plaintiff's Property without substantial change in its condition and was used in and around Oak Bluffs for fire training and suppression activities in a reasonably foreseeable and intended manner.

287. The AFFF, as manufactured and/or sold by the Defendants, was "defective" and "unreasonably dangerous" when it left the Defendants' control, and entered the stream of commerce, because it was dangerous to an extent beyond that which would be contemplated by the ordinary user of AFFF.

288. The AFFF manufactured and/or sold by Defendants was defective in design because, even when used as intended and directed by AFFF Defendants, it can result in the contamination of soil and groundwater with PFAS creating a significant threat to groundwater and drinking water supplies.

289. At all times, Defendants were capable of making AFFF that did not contain PFAS. Thus, reasonable alternative designs existed which were capable of preventing Plaintiff's damage.

290. The risks posed by AFFF containing PFAS far outweigh the products' utility as a flame-control product.

291. The likelihood that Defendants' AFFF Products would be spilled, discharged, disposed of, or released onto land and contaminate Plaintiff's Property and the surrounding community, and the gravity of that damage, far outweighed any burden on Defendants to adopt an alternative design, and outweighed the adverse effect, if any, of such alternative design on the utility of the product.

292. Had Plaintiff known of these dangers, it would have taken steps to ensure such products were used and disposed of differently to prevent potential exposure and contamination of the environment.

293. Plaintiff relied on Defendants' implied warranty that their AFFF Products were safe for use in outdoor fire emergencies and training exercises.

294. As a direct and proximate result of Defendants' unreasonably dangerous design, manufacture, and sale of AFFF containing PFAS, Plaintiff has suffered, and continues to suffer, property damage requiring investigation, remediation, monitoring costs, and other damages in an amount to be determined at trial. Defendants committed each of the above-described acts and omissions knowingly, willfully, and/or with fraud, oppression, or malice, and with conscious and/or reckless disregard for the health and safety of others, and for Plaintiff's Property rights. Defendants are strictly, jointly, and severally liable for all such damages.

COUNT II:
Breach of Implied Warranty of Merchantability (Failure to Warn)
(Against all Defendants)

295. Plaintiff repeats and restates the allegations set forth in the previous paragraphs as if fully restated in this cause of action.

296. As a manufacturer, distributor, and/or seller of AFFF containing PFAS, Defendants had a duty to provide adequate warnings of the risks of these products to all persons whom its product might foreseeably harm, including Plaintiff and the public.

297. Defendants' AFFF Products were unreasonably dangerous for its reasonably anticipated uses for the following reasons:

a. PFAS causes extensive groundwater contamination, even when used in its foreseeable and intended manner;

b. Even at extremely low levels, PFAS render drinking water unfit for consumption;

c. PFAS poses significant threats to public health; and

d. PFAS create real and potential environmental damage.

298. Defendants knew of the health and property damage risks associated with their AFFF Products, and failed to provide a warning that would lead an ordinary reasonable user or handler of a product to contemplate the dangers associated with their products or an instruction that would have allowed Plaintiff to avoid the damage to its property and the surrounding community.

299. Despite Defendants' knowledge of the environmental and human health hazards associated with the use and/or disposal of their AFFF Products in the vicinity of drinking water supplies, including PFAS contamination of public drinking supplies and private wells, Defendants failed to issue any warnings, instructions, recalls, or advice regarding their AFFF Products to Plaintiff, governmental agencies or the public.

300. Plaintiff would have heeded legally adequate warnings and would not have purchased AFFF products containing PFAS or would have taken steps to ensure such products were used and disposed of differently to prevent potential exposure and contamination of the environment.

301. As a direct and proximate result of Defendants' failure to warn, Plaintiff has suffered, and continues to suffer, property damage requiring investigation, remediation, and monitoring costs to be determined at trial.

302. Defendants knew that it was substantially certain that its acts and omissions described above would threaten public health and cause extensive contamination of Plaintiff's property and the surrounding community's drinking water supplies. Defendants committed each of the above-described acts and omissions knowingly, willfully, and/or with fraud, oppression, or malice, and with conscious and/or reckless disregard for the health and safety of others, and for

Plaintiff's Property rights. Defendants are strictly, jointly, and severally liable for all such damages.

COUNT III:
Negligence
(Against all Defendants)

303. Plaintiff repeats and restates the allegations set forth in the previous paragraphs as if fully restated in this cause of action.

304. As a manufacturer and seller of AFFF Products, Defendants owed a duty to Plaintiff and to all persons whom its products might foreseeably harm and to exercise due care in the formulation, manufacture, sale, labeling, warning, and use of AFFF containing PFAS.

305. Defendants owed a duty to Plaintiff to act reasonably and not place inherently dangerous AFFF Products into the marketplace when its release into the drinking water supplies was imminent and certain.

306. Defendants knew or should have known that PFAS are highly soluble in water, highly mobile, extremely persistent in the environment, and high likely to contaminate water supplies if released into the environment.

307. Defendants knew or should have known that PFAS were leaching from AFFF used for fire protection, training, and response activities and would contaminate water supplies.

308. Despite the fact that Defendants knew that PFAS are toxic, can contaminate water resources, and are carcinogenic, Defendants negligently:

a. designed, manufactured, formulated, handled, labeled, instructed, controlled, marketed, promoted, and/or sold AFFF Products containing PFAS, and/or their chemical precursors;

b. issued deficient instructions on how their AFFF Products should be used and disposed of, thereby permitting PFAS to contaminate the groundwater in and around Oak Bluffs;

c. failed to recall and/or warn the users of their AFFF Products of the dangers of groundwater contamination as a result of standard use and disposal of their products; and

d. failed and refused to issue the appropriate warnings and/or recalls to the users of their AFFF Products.

309. The magnitude of the burden on the Defendants to guard against this foreseeable harm to Plaintiff was minimal, as the practical consequences of placing this burden on the Defendants amounted to a burden to provide adequate instructions, proper labeling, and sufficient warnings about their AFFF Products.

310. As manufacturers, distributors and/or sellers, Defendants were in the best position to provide adequate instructions, proper labeling, and sufficient warnings about their AFFF Products.

311. As a direct and proximate result of Defendants' negligence, Plaintiff has suffered, and continues to suffer, property damage requiring investigation, remediation, and monitoring costs to be determined at trial.

312. Defendants knew that it was substantially certain that its acts and omissions described above would threaten public health and cause extensive contamination of Plaintiff's property and the surrounding community's drinking water supplies. Defendants committed each of the above-described acts and omissions knowingly, willfully, and/or with fraud, oppression, or malice, and with conscious and/or reckless disregard for the health and safety of others, and for Plaintiff's property rights. Defendants are strictly, jointly, and severally liable for all such damages.

COUNT IV:
Trespass
(Against all Defendants)

313. Plaintiff repeats and restates the allegations set forth in the previous paragraphs as if fully restated in this cause of action.

314. Plaintiff is the owner, operator, and actual possessor of real property and drinking water supply wells.

315. Defendants designed, manufactured, distributed, marketed, and sold AFFF Products with the actual knowledge and/or substantial certainty that AFFF containing PFAS would, through normal use, release PFAS that would migrate into groundwater, causing contamination.

316. Defendants negligently, recklessly, and/or intentionally designed, manufactured, distributed, marketed, and sold AFFF Products in a manner that caused PFAS to contaminate Plaintiff's property, wells, and the surrounding community.

317. As a direct and proximate result of Defendants' trespass, Plaintiff has suffered and continues to suffer property damage requiring investigation, remediation, and monitoring costs.

318. Defendants knew that it was substantially certain that its acts and omissions described above would threaten public health and cause extensive contamination of Plaintiff's property, wells, and the surrounding community's drinking water supplies. Defendants committed each of the above-described acts and omissions knowingly, willfully, and/or with fraud, oppression, or malice, and with conscious and/or reckless disregard for the health and safety of others, and for Plaintiff's property rights. Defendants are strictly, jointly, and severally liable for all such damages.

COUNT V:
Market Share Liability, Alternative Liability, Concert of Action, Enterprise Liability
(Against all Defendants)

319. Plaintiff repeats and restates the allegations set forth in the previous paragraphs as if fully restated in this cause of action.

320. Defendants in this action are manufacturers that control a substantial share of the market for AFFF Products in the United States and are jointly responsible for the contamination of Plaintiff's and the surrounding community's groundwater supply and for causing the damages and injuries complained of in this Complaint.

321. Market share liability attaches to all Defendants and the liability of each should be assigned according to its percentage of the market for the AFFF Products at issue in this Complaint.

322. Because PFAS are fungible, it may be impossible to identify the exact Defendant who manufactured any given AFFF Product that contained the PFAS found free in the soil and groundwater, and each of these Defendants participated in a state-wide and national market for AFFF Products during the relevant time.

323. Concert of action liability attaches to all Defendants, each of which participated in a common plan to commit the torts alleged herein and each of which acted tortuously in pursuance of the common plan to knowingly manufacture and sell inherently dangerous AFFF containing PFAS.

324. Enterprise liability attaches to all of the named Defendants for casting defective products into the stream of commerce.

COUNT VI:
Actual Fraudulent Transfer
(Against DuPont, Chemours Co., Chemours FC, Corteva, Inc., DuPont de Nemours, Inc., E. I. DuPont de Nemours and Company)

325. Plaintiff repeats and restates the allegations set forth in the previous paragraphs as if fully restated in this cause of action.

326. Through their effectuation of the Spinoff, Chemours Co., Chemours FC, Corteva, Inc., DuPont de Nemours, Inc., E. I. DuPont de Nemours and Company (the "Fraudulent Transfer Defendants") caused Chemours Co. to transfer valuable assets to DuPont, including but not limited to the $3.9 billion dividend (the "Transfers"), while simultaneously assuming significant liabilities (the "Assumed Liabilities").

327. The Transfers and Assumed Liabilities were made for the benefit of DuPont.

328. At the time that the Transfers were made, and the Liabilities were assumed, and until the Spinoff was complete, DuPont was in a position to, and in fact did, control and dominate Chemours Co.

329. The Fraudulent Transfer Defendants made the Transfers and incurred the Assumed Liabilities with the actual intent to hinder, delay, and defraud the creditors or future creditors of Chemours Co.

330. Plaintiff has been harmed as a result of the conduct of the Fraudulent Transfer Defendants.

331. Plaintiff is entitled to avoid the Transfers and to recover property or value transferred to DuPont.

COUNT VII:
Constructive Fraudulent Transfer
(Against DuPont, Chemours Co., Chemours FC, Corteva, Inc., DuPont de Nemours, Inc., E. I. DuPont de Nemours and Company)

332. Plaintiff repeats and restates the allegations set forth in the previous paragraphs as if fully restated in this cause of action.

333. Chemours Co. did not receive reasonably equivalent value from DuPont in exchange for the Transfers and Assumed Liabilities.

334. Each of the Transfers and the assumption of the Assumed Liabilities by Chemours Co. was made to or for the benefit of DuPont.

335. At the time that the Transfers were made and the Assumed Liabilities were assumed, and until the Spinoff was complete, DuPont was in a position to, and in fact did, control and dominate Chemours Co.

336. The Fraudulent Transfer Defendants made the Transfers and assumed the Assumed Liabilities when Chemours Co. was engaged or about to be engaged in a business for which its remaining assets were unreasonably small in relation to its business.

337. Chemours Co. was insolvent or in contemplation of insolvency at the time of the Transfers, or became insolvent as a result of the Transfers and its assumption of the Assumed Liabilities.

338. At the time that the Transfers were made and Chemours Co. assumed the Assumed Liabilities, the Fraudulent Transfer Defendants intended to incur, or believed or reasonably should have believed, that Chemours Co. would incur debts beyond its ability to pay as they became due.

339. Plaintiff has been harmed as a result of the Transfers.

340. Plaintiff is entitled to avoid the Transfers and to recover property or value transferred to DuPont.

PUNITIVE DAMAGES

341. Plaintiff repeats and restates the allegations set forth in the previous paragraphs as if fully restated in this cause of action.

342. At all times material, Defendants had actual knowledge of the wrongfulness of their conduct and the high probability that injury or damage to the Plaintiff would result, and despite that knowledge, willfully, wantonly, and recklessly pursued their course of conduct.

343. Defendants' conduct was so gross and flagrant as to show a reckless disregard or a conscious wanton, reckless indifference to consequences or a grossly careless disregard for the life, safety, property, or rights of the Plaintiff, and the Defendants actively and knowingly participated in such conduct, and/or their officers, directors, or managers knowingly condoned, ratified or consented to such conduct.

344. Defendants' willful, wanton, malicious, and/or reckless conduct includes but is not limited to Defendants' failure to take all reasonable measures to ensure PFAS, which they knew would be harmful to Plaintiff, would not enter into public water systems, thus endangering the lives of the citizens to whom Plaintiff provides water, as well as harming the environment and causing Plaintiff to incur significant damages to remediate the PFAS contamination, which warrants the imposition of punitive damages.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff demands judgment against Defendants as follows:

a. Enter judgment in its favor and against Defendants on each Count of this Complaint;

b. An order that Defendants pay all damages suffered by Plaintiff, including but not limited to investigation, clean-up, abatement, remediation, and monitoring costs incurred by Plaintiff, or for which Plaintiff is or was legally responsible, to comply with the EPA's proposed NPDWR and MassDEP drinking water regulations;

c. An order that Defendants are required to abate the nuisance and trespass Defendants have caused;

d. An order voiding the Chemours Transfers and the DuPont Transfers to the extent necessary to satisfy Plaintiff's claims;

e. An order enjoining New DuPont from distributing, transferring, capitalizing, or otherwise transferring any proceeds from the sale of any business lines, segments, divisions, or other assets that formerly belonged to Old DuPont;

f. An award to Plaintiff for the costs of this suit (including but not limited to expert fees) and reasonable attorneys' fees, as provided by law;

g. An award of pre-judgment and post-judgment interest as provided by law;

h. An award for treble, punitive, and/or enhanced compensatory damages; and

i. An award for such other relief the Court deems just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Federal Rule of Civil Procedure 38, Plaintiff demands a jury trial.

June 29, 2023

OAK BLUFFS WATER DISTRICT

By its Attorneys,

/s/ James L. Ferraro, Jr.

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